

INDEX OF SURGICAL PROGRESS.

HEAD AND NECK.

I. On Evisceration of the Eyeball, and Introduction of an Artificial Vitreous. By R. BRUDNELL CARTER, F.R.C.S. (London). Mr. Carter has emptied the eyeball and inserted a glass globe in 13 cases—in two eyes for intraocular tumor, one for chronic glaucoma, in four which had been destroyed by chronic inflammation, in five which had sustained injury, and one disorganized by acute inflammation. In the earlier operations, Dr. Mules' instructions were followed precisely. There were several failures of union partial or complete, but since adopting, at Dr. Mules' suggestion, the use of silk sutures, there was perfect union in every case but one. In the first 11 cases there was some swelling and pain, but this was remedied in the last 2 by using Dr. Mules' method of sub-conjunctival drainage by a strand of twisted horsehairs.

Mr. Carter's present procedure is as follows: The conjunctival sac is washed out with a 20% solution of Barff's boroglyceride, the lids widely separated by the speculum, the cornea fixed at the centre, cut all round the margin by a cataract knife, and wholly lifted off. The eyeball is then emptied, and the inner surface of the sclera scraped with a Volkmann's spoon, removing every trace of choroid and ciliary body by a small sponge on a handle. Bleeding is checked by packing the cavity with a sponge soaked in boroglyceride solution, and while the sponge is in position the circular wound is converted into an ellipse by making two horizontal scissor cuts, and cutting off the angles on either side. When the sponge is removed, the cavity should be clean and white, it is syringed out with boroglyceride, and a glass ball of such size that the edges of the wound will easily meet over it, is taken out of the boroglyceride solution and placed within the cavity. The open-

ing is then united by stout silk sutures, which have been soaked in a solution of salicylic acid, 1 part, glycerine 1 part, alcohol 9 parts. The needles being passed through the scleral and conjunctival tissues at a good distance from the margins. Three sutures are generally sufficient, and when the edges of the wound are in perfect apposition a scissor cut is made through the conjunctiva below the wound, the scissors burrowed back beyond the equator between the conjunctiva and sclera, and a drain composed of horsehairs inserted. A hypodermic injection of morphine is given before recovery from the anæsthetic, (chloroform being generally preferred to ether on account of its producing a smaller tendency to bleed), and after a final washing with boro-glyceride solution, the eyelids are covered with linen smeared with sanitas jelly, and over this an aseptic pad. If there be much subsequent swelling of the conjunctiva, the protruding part is painted with cocaine and freely punctured. The sutures are removed in a week or 10 days, by which time union is usually complete.

Mr. Carter then gives the details of the 13 cases. Even in the few cases which were to some extent unsuccessful, the results were infinitely superior to any which could have been gained by enucleation. There is no apparent difference between the mobility or position of the two eyes, the lachrymal puncta are kept in proper contact with the artificial eye, and the patient is, generally speaking, unconscious of the presence of the latter. Two of the cases encourage the adoption of the method in all intraocular tumors which are not gliomata—for in some of the latter the disease may have penetrated backward into the nerve. In the case of sarcomata, however, this is no excuse for enucleation. The tendency to recurrence is in distant parts and not in the orbit, and the uveal tissue, in which the tumor is seated lies in structural connection with tissue passing out of the eyeball.

Mr. Carter then discusses various objections which have been made to Mules' operation. The unfounded fear of sympathetic ophthalmitis, or of the artificial vitreous being a source of danger, that the greater mobility of the stump will be only temporary, etc. In the first case the glass ball has been tolerated for 19 months, the patient being unconscious of its presence, and in no instance has it produced the smallest

uneasiness or irritation, when once healing is complete, although if partially exposed it is apt to cause pain. Mr. Carter's experience leads him to think that we are indebted to Dr. Mules for one of the most remarkable and valuable improvements in ophthalmic surgery. Most of the objections which could at first be urged against it have been already removed by experience, and it is the duty of surgeons to endeavor to remove any others which may remain, and not to deprive the patient of the great benefits as regards both comfort and appearance, which the principle is calculated to confer.—*Medical Press and Circular*, Aug. 17, 1887.

P. S. ABRAHAM (London).

II. Trepanation of Mastoid Process, complicated by Perforation of the Transverse Sinus. By DR. R. VON BARACZ, (Lemberg). He operated with the hollow chisel. After removal of the granulations, whilst smoothing the outer plate there was a rush of dark blood showing a marked periodicity of flow. The accident occurred despite observation of the rules laid down by Schwartze. He tamponed with 50 % iodoform gauze.

He has collected 5 other cases. By adding that of Benton (*Proc. King's County Med. Soc.*, p. 260, Jan. 1884,) who was, however, trephining for another purpose, we have a total of 7 fairly certain cases. None terminated fatally although in one (Guye's) air entered.—*Wien. Med. Woch.*, 1887, Nos. 38-39.

WM. BROWNING (Brooklyn).

III. Phosphorous Necrosis of the Jaw. By DR. ED. ROSE, (Berlin). The interesting studies included in this paper are concerned with the behavior of the operator in those cases of necrosis of the jaw resulting from phosphorus poisoning or acute osteomyelitis.

Conservative surgery has directed itself here very pointedly to the preservation of the teeth in those cases demanding resection. Beginning with a review of 12 cases of phosphorus necrosis of the upper and lower jaw, the author, by a very careful comparison of results and post-mortem specimens, concludes in favor of the "tertiary subosteo-